

CLAIMS

Having thus described the aforementioned invention, we claim:

1 1. A housing for securing an arc plate, said arc plate including a first
2 longitudinal edge, an opposed second longitudinal edge, a notched first end, and a
3 second end opposed to said notched first end, said housing comprising:

4 a first support member;

5 a second support member secured in spaced relation to said first support
6 member;

7 a first securing ledge protruding from said first support member and toward
8 said second support member;

9 a first opposing ledge protruding from said first support member and toward
10 said second support member, said first securing ledge and said first opposing ledge
11 defining a first slot adapted to receive said first longitudinal edge of said arc plate;

12 a second securing ledge protruding from said second support member and
13 toward said first support member;

14 a second opposing ledge protruding from said second support member and
15 toward said first support member, said second securing ledge and said second
16 opposing ledge defining a second slot adapted to receive said second longitudinal
17 edge of said arc plate;

18 a stop member extending into one of said first slot and said second slot, said
19 stop member engaging said first end of said arc plate; and

20 a locking member extending into said first slot to engage said second end of
21 said arc plate.

1 2. The housing of Claim 1 wherein said stop member is resilient and
2 deformable.

1 3. The housing of Claim 1 wherein said locking member includes a
2 resilient member and a tab, said resilient member having a first end fixedly
3 attached to said first securing ledge and having a second end connected to said
4 tab, said tab having an inside face for securing said arc plate in said housing.

1 4. The housing of Claim 1 wherein said first support member, said
2 second support member, said first securing ledge, said second securing ledge, said
3 stop member, and said locking member form an integral molded assembly.

1 5. A housing for securing an arc plate, said arc plate including a first
2 longitudinal edge, an opposed second longitudinal edge, a notched first end, and a
3 second end opposed to said notched first end, said housing comprising:

4 a first support member;

5 a second support member secured in spaced relation to said first support
6 member;

7 a first securing ledge protruding from said first support member and toward
8 said second support member;

9 a first opposing ledge protruding from said first support member and toward
10 said second support member, said first securing ledge and said first opposing ledge
11 defining a first slot adapted to receive said first said longitudinal edge of said arc
12 plate;

13 a second securing ledge protruding from said second support member and
14 toward said first support member;

15 a second opposing ledge protruding from said second support member and
16 toward said first support member, said second securing ledge and said second
17 opposing ledge defining a second slot adapted to receive said second longitudinal
18 edge of said arc plate;

19 a stop member extending into one of said first slot and said second slot, said
20 stop member engaging said first end of said arc plate, said stop member being
21 resilient and deformable; and

22 a locking member extending into said first slot to engage said second end of
23 said arc plate, said locking member having a resilient member and a tab, said
24 resilient member having a first end fixedly attached to said first securing ledge and
25 having a second end connected to said tab, said tab having an inside face in
26 contact with said arc plate.

1 6. An apparatus for quenching an arc, said apparatus comprising:

2 a first wall;

3 a second wall secured in spaced relation to said first wall;

4 a first slot formed in said first wall and opening toward said second wall;

5 a second slot formed in said second wall and opening toward said first wall;

6 a back stop member secured in spaced relation to said first wall;

7 a locking member secured in spaced relation to said first wall;

8 an arc plate in slidable communication with said first slot and said second
9 slot;

10 whereby said arc plate is secured by said first slot, said second slot, said
11 back stop member, and said locking member.

1 7. The apparatus of Claim 6 wherein said back stop member is resilient
2 and deformable, said back stop member being deformed and in contact with said
3 arc plate, whereby said back stop member forces said arc plate against said locking
4 member.

1 8. The apparatus of Claim 6 wherein said locking member includes a
2 resilient member and a tab, said resilient member having a first end fixedly
3 attached to said first wall and having a second end connected to said tab, said tab
4 having an inside face in contact with said arc plate.

1 9. An apparatus for quenching an arc, said apparatus comprising:
2 a first wall;
3 a second wall secured in spaced relation to said first wall;
4 a first slot formed in said first wall and opening toward said second wall;
5 a second slot formed in said second wall and opening toward said first wall;
6 an arc plate in slidable communication with said first slot and said second
7 slot;
8 a locking member secured in spaced relation to said first wall and including
9 a resilient member and a tab, said resilient member having a first end fixedly
10 attached to said first wall and having a second end connected to said tab, said tab
11 having an inside face in contact with said arc plate;
12 a back stop member secured in spaced relation to said first wall, said back
13 stop member being resilient and deformable, said back stop member being
14 deformed and in contact with said arc plate, whereby said back stop member
15 pushes said arc plate towards said tab;
16 whereby said arc plate is secured by said first slot, said second slot, said
17 back stop member, and said locking member.

1 10. The apparatus of Claim 9 wherein said first slot, said second slot,
2 said back stop member, and said locking member form an integral assembly.

1 11. An apparatus for quenching an arc, said apparatus comprising:

2 an arc stack housing having a first member secured in spaced relation to a
3 second member, said first member and said second member defining a slot having
4 a back end and an insertion end;

5 a back stop positioned at said back end;

6 a locking member positioned at said insertion end;

7 an arc plate insertable into said slot.

1 12. An apparatus for quenching an arc, said apparatus comprising:

2 an arc stack housing;

3 an arc plate; and

4 a means for securing said arc plate in said arc stack housing.

1 13. The apparatus of Claim 12 further comprising a means for preventing
2 said arc plate from vibrating in said arc stack housing.